Quadrant II – Transcript and Related Materials

Programme: Bachelor of Arts (Third year)

Subject: Economics

Paper Code: ECD 111

Paper Title: Growth and Development Paper I

Unit: 4

Module Name: Critical Minimum Effort

Notes

Leibensteins Critical Minimum Effort/Theory of Under Development:

Harvey Leibenstein is of the view that UDCs are characterized by vicious circle of poverty (VCP) which keeps them around a low income per capita equilibrium state. The way out of this impasse is a certain ***'Critical minimum effort'*** which would raise the per capita to a level at which sustained development could be maintained. In other words, a UDC will have to introduce 'Stimulus' in an amount which should be more than a critical level for the sake of change.

Leibenstein says that every economy is subject to **'Shocks and Stimulants'.** A shock has the impact of reducing the per capita income initially; while a stimulant tends to increase it. Certain countries are poor and backward because of the reason that the magnitude of stimulant is small while that of shocks is large. On the other hand, if income raising forces are more than income depressing forces the economy will be having critical minimum effort which will take the economy on the path of development.

Growth Agents:

According to Leibenstein, if the income increasing forces expand at a higher rate than the income depressing forces, then the favorable conditions for economic development will be existing. In the process of development such conditions are created by the expansion of ***'Growth Agents'.***

These growth agents comprise of **entrepreneurs, investors, savers and the innovators**. The growth contributing activities result in creation of entrepreneurship, the increase in stock of knowledge, the expansion of production skills of people and increase in the rate of savings and investment.

Leibenstein introduces two types of incentives for UDCs:

(i) Those incentives which do not increase national income, but they bring a change in the distribution of income. He calls them **"Zero-Sum incentives".**

(ii) Those incentives which result in expansion of national income. He calls them **"Positive Sum incentives".**

The entrepreneurs in UDCs are engaged in zero sum activities. They wish to attain monopolies; political influence; and social prestige. Thus as a result of zero sum activities the real national incomes of UDCs do not increase. They just cause a change in the distribution of income. The positive sum activities which are essential for development have limited scope in UDCs. Therefore, according to Leibenstein, there is a need to direct the zero sum activities of the entrepreneurs of UDCs to the positive sum activities. It is, therefore, necessary that 'minimum effort' should be sufficiently large to create an environment whereby the positive sum activities could flourish.

The following ***factors are responsible for depressing per capita income in UDCs:***

(i) Zero sum entrepreneurial activities.

(ii) Conservative activities of organized and unorganized labor.

(iii) The resistance to new knowledge and ideas and attachment to old ideas.

(iv) Increase in consumption, and unproductive use of those resources which could be used for capital accumulation.

(v) Increase in population.

(vi) The high capital-output ratio.

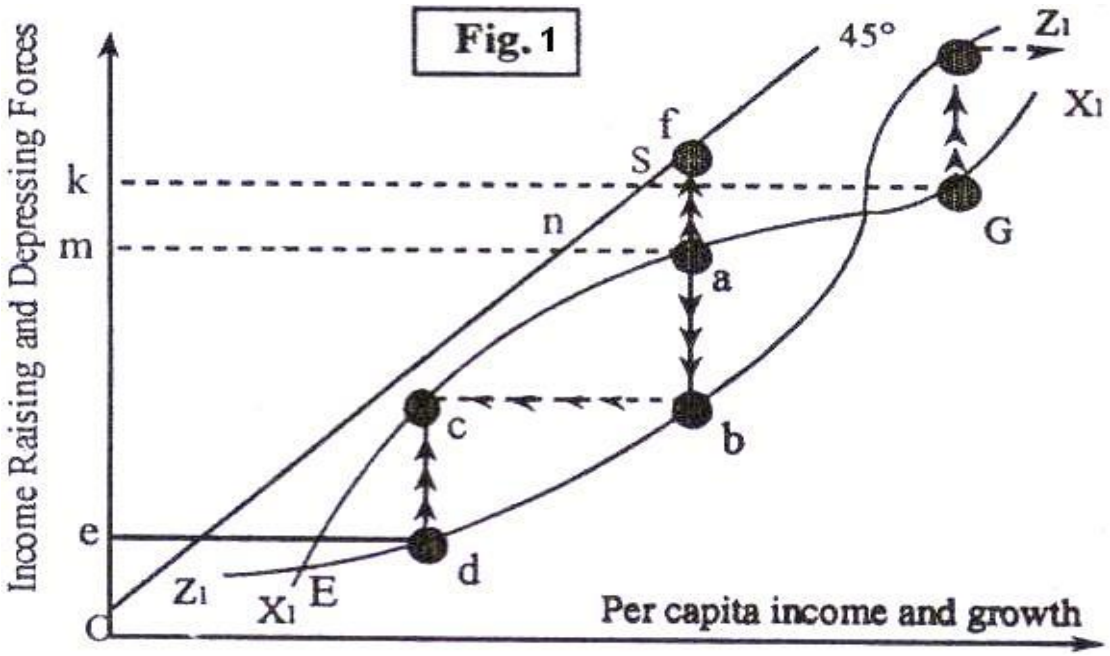
To overcome these influences which keep an economy in backwardness a sufficiently large critical minimum effort is required to sustain a rapid rate of economic growth. In this way,

on the one side the zero sum activities could be overcome, and positive sum activities could flourish. As a result of critical minimum effort, the per capita income would rise leading to increase the level of savings and investment. They will in a turn would lead to:

(i) An expansion of growth agents. (ii) The capital-output ratio will come down. (iii) The income depressing forces will get weaken. (iv) Such a social environment will be created which will promote social and economic mobility. (v) The secondary and tertiary sectors will expand and specialization will be encouraged. (vi) An atmosphere will be created where there will be social and economic change leading to decrease the population.

Now we use Fig. 1 to represent the role of income generating and income depressing forces.

Diagram/Figure:



The 45° line shows, the induced increase and decrease in the per capital income. While $X_1 X_1$ curve shows income generating forces and $Z_1 Z_1$ curve represents income depressing forces.

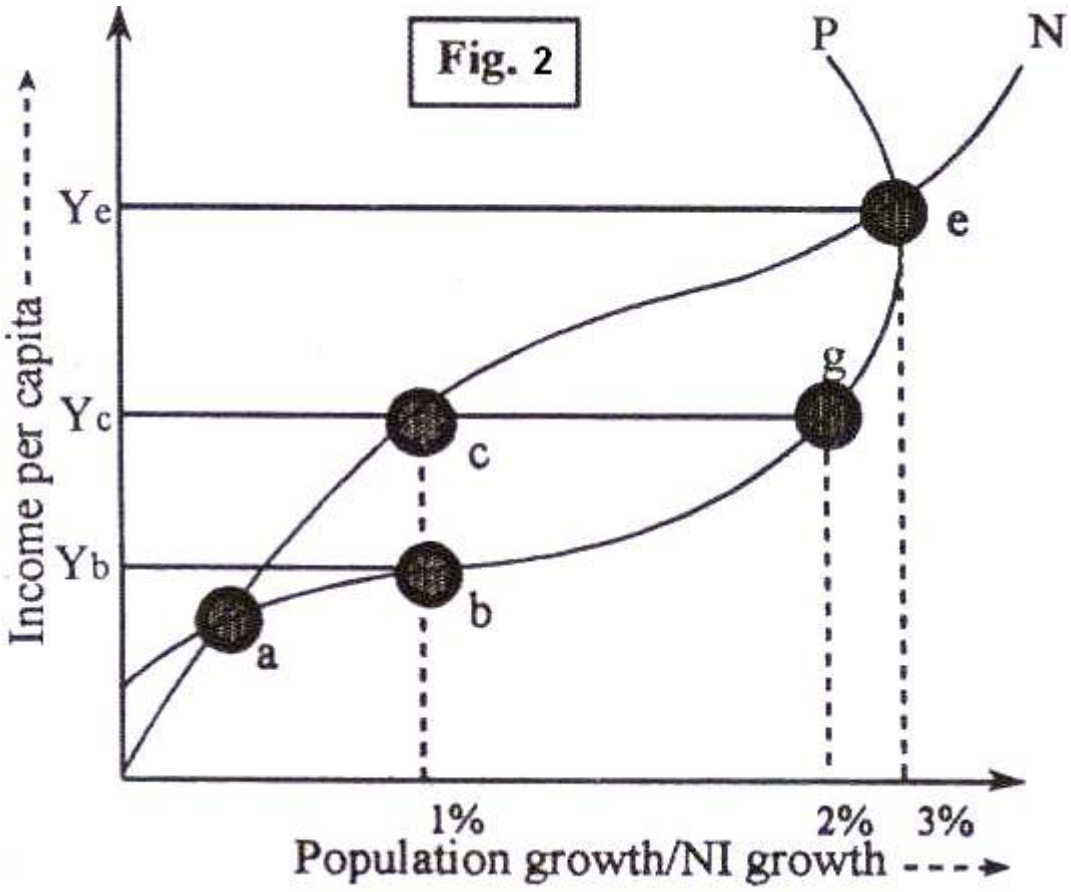
If due to 'Stimulants' the per capita income increases from Oe to Om, the per capita income will increase up to na. But here the income depressing forces 'fb' are greater than income generating forces 'fa'. As a result, the economy will follow the downward path 'abcd'.

In this way, the economy reaches point 'E'. Therefore, if the economy is to be put on the path of development the per capita income will have to be increased till Ok by increasing investment. As a result, the income will increase till SG which will in turn generate the path of endless expansion of per capita income as shown by arrow movement rising above G. That package of investment which leads to increase per capita income even after point 'G' is given the name of ***"Critical Minimum Effort by Leibenstein".***

The critical minimum effort need not to be made all at once. It would be more effective if it is broken up into a series of smaller efforts.

Leibenstein's thesis is based upon this empirical evidence that the rate of population growth is a function of level of per capita income. At the subsistence level population growth declines. According to Leibenstein, at biological determined maximum growth rate of population, the equilibrium level of income, fertility mortality rates maximum consistent survival population.

If the per capita income is increased above the subsistence equilibrium position, the mortality rate falls without any drop in fertility rate. As a result, the population will grow. But it will happen only up to a point. Beyond that the increase in per capita income lowers the fertility rate and as development gains momentum the rate of population growth declines. According to Leibenstein, a biological determined maximum growth rate of population is in between 3% to 4%. Now we use Fig. 2 to demonstrate it.



Here the curve N represents that increase in per capita income which equalizes the increase in population to increase in national income while the curve P shows the growth rate of population at different levels of per capita. We start with point 'a' where the economy is in equilibrium at subsistence level. Here neither income nor population increases. If per capita is increased till Yb, the population growth rate and increase in national income are of 1%. If the level of per capita income is Yc, the growth of population is greater than growth rate of national income. Ycg > Ycc or 2% > 1%.

Therefore, the need is to increase per capita income in such a way that increase in national income is more than increase in population. Therefore, if per capita income increases more than Ye, the population growth starts declining. At point e, the population growth rate is 3% per annum which is the maximum possible growth rate of population on biological grounds. Thus according to Leibenstein, the Ye is the minimum critical level of per capita income which is necessary for economic growth.

Reference:

Hayami, Y; Godo Y; *Development economics (2008*), Oxford University Press, New York